Chrusopelea ornata to examine how the matter stands respecting the hypapophyses, and to verify his statement. An opportunity of complying with his request has kindly been afforded me as regards specimens belonging to the Zoological Museum of Copenhagen, and I have thereby found my statement perfectly verified: there were several specimens, some with, others without developed hypapophyses in the posterior region, and I hope that Mr. Boulenger too will succeed in finding a specimen having these apophyses.

That Coluber fasciatus should be the same as Drymobius Boddaertii, var. Rappii, Gthr., seems rather doubtful. supposing one were to keep to Mr. Boulenger's own descrip-

tion of it in Cat. Snakes.

Having shown Mr. Boulenger's criticism in these instances to be unjustified, I pass over his suppositions, put forward without argument, as regards the other determinations. I will only mention that I have not been "encouraged &c."

XIV.—List of the Lizards in the Zoological Museum of Lund, with Descriptions of new Species. By NILS ROSEN, Zool. Inst. Lund.

[Plates VII.-IX.]

Fam. Geckonidæ.

- 1. Gymnodactylus marmoratus, Kuhl. Java.
- 2. Gymnodactylus Miliusii, Bory. West Australia.
- 3. Phyllodactylus marmoratus, Gray. Australia.
- 4. Ptyodactylus lobatus, Geoffr. Egypt.
- 5. Thecadactylus rapicaudus, Houtt. West Indies.
- 6. Hemidactylus frenatus, D. & B. Java.
- 7. Hemidactylus Bowringii, Gray.

- 8. Hemidactylus platyurus, Schn. Java.
- 9. Gehyra mutilata, Wiegm. Java.
- Gehyra variegata, D. & B. West Australia.
- 11. Gehyra australis, Gray. Australia.
- Spathoscalabotes mutilatus, Gthr. Java. Collected (1897) by Dr. Hj. Möller.
- 13. Naultinus elegans, Gray. New Zealand.
- Gecko verticillatus, Laur. Java.
- 15. Gecko monarchus, D. & B.
- Ptychozoon homalocephalum, Crev. Java.

17. Tarentola tuberculata, sp. n. (Pl. VII. fig. 1; woodcut, fig. 1.)

A supraorbital bone. Snout longer than the distance between the eye and the ear-opening. Rostral scarcely twice as broad as high. The nostril is pierced between the first labial and three shields (woodcut, fig. 1). A median eleft in the upper part of the rostral. Ten upper labials, posterior very small. Mental not twice as long as it is broad in the middle. Three chin-shields on each side, in contact with the lower labials; latter eight or nine. Anterior border of ear-opening not denticulated. Neck, back, and limbs covered with large pyramidal tubercles and smaller conical ones: on the back they are more or less distinctly arranged in twelve longitudinal rows; the largest tubercles on the back mostly surrounded by smaller ones. The tail for about two thirds of its length* with posteriorly directed large spine-like tubercles, decreasing in size. Greyish brown above, more or less marbled with darker and lighter.

Algiers (C. Ask, 1895-96).

^{*} In one specimen nearly to the end.

One specimen, with rudiments of claws on the first, second,

and fifth digits.

This new species is very closely allied to *T. mauritanica*, L. (Boulenger, 'Catalogue of Lizards,' i. p. 196). It differs in the following points:—

(1) The nostril is pierced between the first labial and three shields; in T. mauritanica, L., and, so far as I know, in all the other species of Tarentola, it is pierced between the first labial and two shields.

(2) The median cleft in the upper part of the rostral is

more distinct in this species.

(3) A much greater number of larger tubercles on the body as well as on the limbs and the tail.

Fig. 1.

Tarentola tuberculata, sp. n. Upper view of snout.

18. Tarentola annularis, Geoffr. Egypt.

19. Spherodactylus argus, Gosse.

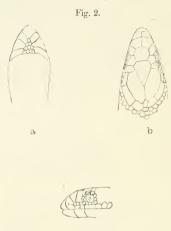
Fam. Pygopodidæ.

20. Delma Fraseri, Gray. Victoria (Australia).

21. Delma lineata, sp. n. (Pl. VIII. fig. 1; woodcut, fig. 2.)

Snout not prominent, a little shorter than the distance between the orbit and the ear-opening. Tail a little more than twice as long as head and body. Rudimentary limbs small. Rostral triangular. Nostril pierced in the lower portion of the nasal, which forms a suture with its fellow on the snout. The anterior part of the nasal fused with the first upper labial. No supranasals. A pair of large plates between the nasals and the præfrontal; the latter seven-sided, not so broad as the frontal. Three enlarged scales on the outer

side of each parietal. A large loreal. Four small plates in a line between the orbit and the nasal and some small ones between the loreal and the orbit. Two supraorbitals. Seven upper labials; fourth elongate and situated below the orbit, from which it is separated by a row of small scales. Mental large, triangular, broader than long. Five lower labials, the



Delma lineata, sp. n. a. Lower view of snout. b. Upper view of head. c. Side view o head,

first separated from its fellow by a small scale behind the mental. Sixteen longitudinal rows of scales round the middle of the body. The enlarged ventral scales decreasing in width posteriorly, the anterior at least twice as broad as long; they form 51 pairs. Two large anal scales.

Olive above, lighter beneath, the anterior part of the lower surfaces yellowish. A broad light (grey? in spirit!) vertebral line extending to the end of the tail. The edges of the scales lighter, on the back forming small longitudinal lines between

the rows of scales.

	nım.
Width of head	5
From snout to vent	75
Tail	
Hind limb	

Victoria (Australia). A single specimen.

This species seems to be allied to *D. impar*, Fisch.* ('Catalogue of Lizards,' i. p. 244), from which it differs by having 16 rows of scales round the middle of the body, the first lower labial not in contact with its fellow. In *D. impar*, Fisch., the præfrontal is a little larger than the frontal, whereas this lizard has the frontal larger than the præfrontal. In the coloration there is also some difference. This new species differs from all previously described species of *Delma* by having the anterior part of the nasal fused with the first upper labial (perhaps an individual character).

Fam. Agamidæ.

22. Draco volans, L. Java.

23. Draco fimbriatus, Kulıl.

24. Gonyocephalus Kuhlii, Schleg.

Java.

Supraorbitals more or less distinctly keeled. Total length 300 mm.

25. Calotes cristatellus, Kuhl. Java.

26. Calotes jubatus, D. & B. Java.

27. Calotes tympanistriga, Gray. Java.

28. Calotes versicolor, Daud.

29. Calotes ophiomachus, Merr.

30. Calotes aberrans, sp. n. (Pl. VIII. fig. 3.)

Upper head-scales rather large, irregular, smooth or feebly keeled. A rather large tubercle behind the superciliary edge and a smaller one on its anterior end. A pair of tubercles on the occiput. Tympanum scale-like. A slight nuchal crest, composed of a few small spines. No transverse gular fold. No oblique fold in front of the shoulder. Dorsal crest indistinct; a very slightly serrated ridge. 36

Pseudodelma impar, Fischer, Archiv f. Naturgeschichte, 48 Jahrg. (1882) p. 286.

scales round the middle of the body. Dorsal scales very large, much larger than the ventrals, pointing backwards and downwards, smooth. The median series of the dorsal scales keeled, forming a slight ridge. Ventral scales strongly keeled, larger on the sides of the belly than on the middle. The adpressed hind limb reaches the shoulder. Fourth finger as long as the third or very slightly longer. Tail compressed, with a slight upper ridge. Caudal scales strongly keeled.

The specimen is preserved in spirit. The coloration is indistinct, bluish, marbled white (?).

	mm
Total length	. 200
Head	
From snout to vent	. 81
Fore limb	
Hind limb	
Tail	

Java. A single specimen, collected by Dr. IIj. Möller

(1897).

This species is characterized from all the others by its short hind limbs. It seems to be most allied to *C. tympani-striga* (Gray), from which, however, it is quite distinct.

31. Agama pallida, Reuss.

Egypt.

32. Agama mossambica, Ptrs.

33. Agama stellio, L.

Sinai.

34. Amphibolurus maculatus, Gray.

West Australia. Collected by Dr. N. Holst (1896–97). Seems to differ a little in coloration.

35. Amphibolurus Holsti*, sp. n. (Pl. IX.)

Head moderately large. Snout as long as the diameter of the orbit, with subangular canthus rostralis. Tympanum large. Nostril below the canthus rostralis, much nearer the eye than the tip of the snout. Upper head-scales subequal, strongly keeled, smallest on the supraorbital region. Gular

^{*} I take the liberty of naming this lizard after the Swedish geologist Dr. N. Holst, who has made very valuable collections of reptiles in West Australia.

scales much smaller than ventrals, feebly keeled. A dorsolateral crest on each side of the neck. A well-developed dorsal crest, beginning on the neck and extending on the anterior part of the tail, composed of closely-set compressed spines. Body covered above with very strongly keeled scales, largest and more strongly keeled on the middle of the back, not intermixed with enlarged scales. The keels converge towards the vertebral line. Ventral scales very distinctly keeled. The hind limb stretched forwards reaches beyond the orbit. Limbs with keeled scales. About 55 pores, extending along the whole length of the thighs, scarcely interrupted on the præanal region. Caudal scales equal, keeled.

Brown above, head and body with irregular dark spots and lines. Four large dark spots on the middle of the anterior part of the back. Tail uniform brown. Lighter beneath. Lower surface of head with smaller black spots and a large one in the middle line reaching from snout to the gular sac. The anterior part of belly and the middle of chest black.

Lower surface of fore limbs black.

	mm.
Total length	350
Head	
Body	80
Fore limb	42
Hind limb	90
Tail	240

West Australia. A single specimen, collected by Dr. N.

Holst (Dec. 1896).

This species seems to find a systematic position between A. cristatus, Gray (Cat. Liz. i. p. 383), and A. caudicinctus, Gthr. (Cat. Liz. i. p. 384). To A. cristatus, Gray, it is allied by the dorsal crest and the keeled ventral scales, but these characters are more developed in this new species. In A. cristatus, Gray, the crest is composed of a few widely separated spines, the ventral scales are smooth or very feebly keeled. This species has the crest composed of many spines, in contact with each other, the ventral scales distinctly keeled. In these points it is well separated from A. caudicinctus, which has a very small nuchal crest, a slight dorsal ridge, and smooth ventral scales.—With A. caudicinctus, Gthr., it agrees in having the dorsal scales not intermixed with scattered enlarged scales, as in A. cristatus.

36. Amphibolurus caudicinctus, Gthr.

West Australia. Collected by Dr. N. Holst (1896–97). Seems to agree with the description of A. caudicinctus,

Gthr. (Cat. Liz. i. p. 384), except the coloration. Lighter beneath. Tail dark, with narrow indistinct lighter (white?) rings. In the 'Catalogue of Lizards' A. caudicinctus, Gthr., is described as having regular black rings, narrower than the interspaces between them.

37. Amphibolurus reticulatus, Gray.

West Australia (N. Holst, 1896-97).

Twenty-three specimens (all from West Australia) are preserved in the collections. They vary very much, forming a continuous series, from such as have no trace of a nuchal crest to those in which it is distinct and rather well-developed. In some specimens the ventral scales are feebly but distinctly keeled. The coloration also is very variable. In other characters they agree with the description of A. reticulatus, Gray.—I have not been able to separate them into varieties or species, and I have therefore referred them all to A. reticulatus, Gray.

- 38. Amphibolurus muricatus, White. West Australia.
- 39. Amphibolurus barbatus, Cuv.
- 40. Tympanocryptis cephalus, Gthr. West Australia (N. Holst).
- 41. Uromastix spinipes, Daud. Egypt.
- 42. Moloch horridus, Gray. Australia.

Fam. Iguanidæ.

- 43. Anolis cristatellus, D. & B.
- 44. Anolis Leachii, D. & B. West Indies.
- 45. Norops auratus, Daud.
- 46. Polychrus marmoratus, L.
- 47. Ophryoessa superciliosa, L.
- 48. Liolæmus pictus, D. & B. Chili.

- 49. Amblyrhynchus cristatus, Bell. Galapagos Islands.
- 50. Iguana tuberculata, Laur.
- 51. Iguana delicatissima, Laur.
- 52. Sceloporus spinosus, Wiegm.
- 53. Phrynosoma cornutum, Harl. N. America.

Fam. Anguidæ.

- 54. Ophisaurus apus, Pall.
- 55. Anguis fragilis, L. Europe.

Fam. Varanidæ.

- 56. Varanus salvator, Laur.
- 57. Varanus niloticus, L. Egypt.
- 58. Varanus Gouldii, Gray.
- Varanus caudolineatus, Blgr.
 W. Australia (Dr. N. Holst, 1896).

Fam. Teiidæ.

- 60. Tupinambis teguixin, L. S. America.
- 61. Ameiva surinamensis, Laur. W. Indies.
- 62. Ameiva edracantha, Bocourt. Ecuador.
- 63. Cnemidophorus lemniscatus, Daud.

Fam. Amphisbænidæ.

64. Amphisbæna fuliginosa, L. Ecuador. Ann. & Mag. N. Hist. Ser. 7. Vol. xvi. 65. Trogonophis Wiegmanni, Kaup. Algeria.

Fam. Lacertidæ.

66. Tachydromus sexlineatus, Daud. Java.

67. Lacerta ocellata, Daud.

Algeria.

In the 'Catalogue of Lizards' (iii. p. 13) a variety of L. occllata is described (var. pater), inhabiting Algeria and Tunis, and characterized by having the dorsal scales more distinctly keeled and the occipital shield smaller, viz. as broad as or a little narrower than the frontal. The number of scales across the middle of the body and the number of femoral pores seem to be mostly a little larger. Boulenger says respecting it:—"In some Spanish specimens the occipital is quite of the same size as in 'L. pater,' and also the other characters given as distinctive are by no means constant; therefore the Algero-Tunisian form can, in my opinion, not be specifically separated from the European."—In the specimens (from Algeria) in the collections these characters vary considerably, so that I have not been able to distinguish the var. pater from the European form.

Spec. α	17	femoral	pores;	occipital	broader than	frontal.
b			22	19	22	22
e			57	22	narrower	22
$d \dots$	15	22	22	7.7	, ",	23
e	18		22	22	broader	22
f	11-1	18 44	11	11	11	11

- 68. Lacerta viridis, Laur. Europe.
- 69. Lacerta agilis, L. Europe.
- 70. Lacerta vivipara, Jacq. Europe.
- Lacerta muralis, Laur. Europe.
- Psammodromus algirus, L. Algeria.

Acanthodactylus pardalis, Licht.
 Algeria.

74. Acanthodactylus boskianus, Daud. Algeria.

75. Eremias guttulata, Licht. Algeria.

Fam. Scincidæ.

76. Egernia inornata, sp. n. (Pl. VII. fig. 2; woodcut, fig. 3.)

Head moderate. Curved groove behind the nostril absent or very feebly marked. No distinct suture below the nostril. Fronto-nasal large, larger than the præfrontals, forming a suture with the rostral, separated from the frontal. Præfrontals forming a median suture. Frontal about twice as long as broad, considerably longer than the fronto-parietal. 6 supraoculars, third largest, first and sixth small. 7 upper



Egernia inornata, sp. n. Upper view of head.

labials, fourth, fifth, and sixth below the eye; fourth largest. 3 large temporals. One pair of nuchals. Ear-opening with four obtuse lobules anteriorly. Scales smooth, 42 round the middle of the body. The adpressed limbs overlap. Fourth toe long. Tail slightly compressed. Caudal scales smooth. Upper surface yellowish brown, with irregular dark brown spots, most numerous on the sides. Yellowish beneath.

	mm.
Total length	160
Head	15
Width of head	
From snout to vent	74
Fore limb	22
Hind limb	
Tail	

West Australia (Dr. N. Holst, 1897). A single specimen. Seems to be allied to E. Whitii, Lacép.

77. Egernia depressa, Gthr.

W. Australia (Dr. N. Holst, 1896).

In one specimen (four spec. in the Museum) some dorsal scales with five keels and spines.

78. Trachysaurus rugosus, Gray.

79. Mabuia Perrotetii, D. & B.

80. Mabuia multifasciata, Kuhl.

Java.

One specimen with *feebly* keeled subdigital lamellæ. Hind limbs a little longer. In other respects it seems to agree with *M. multifasciata*, Kuhl.

- 81. Mabuia siamensis, Gthr.
- 82. Mabuia Sloanii, Daud.
- 83. Lygosoma (Hinulia) tæniolatum, White, var. maculata, nov. (Pl. VIII. fig. 2.)

Rostral and præfrontal narrowly in contact; the præfrontals separated. Eight upper labials, the last three largest.

Brown above. A narrow vertebral line, edged with white (in spirit). On each side of the body two longitudinal lines (white in spirit), between which small spots of the same colour arranged in a regular line. White beneath.

West Australia.

Two specimens, collected by Dr. N. Holst (1896).

I have not been able to find any structural characters distinctly separating this lizard from the *L. tæniolatum*, White, and therefore I believe that it is only a colour-variety of that species.

- 84. Lygosoma olivaceum, Gray. Java.
- 85. Lygosoma ornatum, Gray. New Zealand.
- 86. Lygosoma Temminckii, D. & B. Java.
- 87. Eumeces Schneideri, Daud.
- 88. Scincus muscatensis, Murray (?).
- 89. Chalcides ocellatus, Forsk.
 - (a) A (Cat. Liz. iii. p. 401). Algeria, Egypt.
 - (b) B (Cat. Liz. iii. p. 401).
- 90. Chalcides tridactylus, Laur.
 - (a) A (Cat. Liz. iii. p. 404). Algeria.
 - (b) B (Cat. Liz. iii. p. 404). Italy.
 - (c) Var. nov. Four black longitudinal streaks, the median pair broken up. Algeria.

Fam. Chamæleontidæ.

- 91. Chamæleon vulgaris, Daud. Algeria, Sinai.
- 92. Chamæleon senegalensis, Daud.
- 93. Chamæleon gallus, Gthr. Madagascar.

CORRIGENDUM.

Since I finished my descriptions of these lizards, the Ann. & Mag. Nat. Hist. for December 1904 has been published, in which Boulenger has described (p. 414) a new lizard from Western Australia (Amphibolurus Websteri). The

Amphibolurus Holsti, which I have described in this paper as new, agrees with his species, and therefore the name "Holsti (sp. n.)" must be changed to "Websteri, Blgr."

EXPLANATION OF THE PLATES.

PLATE VII.

Fig. 1. Tarentola tuberculata, sp. n. Fig. 2. Egernia inornata, sp. n.

PLATE VIII.

Fig. 1. Delma lineata, sp. n.

Fig. 2. Lygosoma tæniolatum, White, var. maculata, nov.

Fig. 3. Calotes aberrans, sp. n.

PLATE IX.

Amphibolurus Holsti, sp. n.

XV.—Notes on Eastern and Australian Heterocera, with Descriptions of One new Genus and Thirteen new Species. By Colonel Charles Swinhoe, M.A., F.L.S., &c.

Family Eupterotidæ.

1. Melanothrix fumosa, nov.

\$\xi\$. Of a uniform dull smoky brown, shafts of the antennæ with an ochreous tinge; palpi blackish above: fore wings with a broad, white, discal, transverse band, with even sides, very broad on the costa a little beyond the middle, occupying at least a fifth of the wing, gradually narrowing hindwards to the hinder angle, where it is about one eighth of an inch broad; no other markings. Underside as above, general tint of colour paler, costal line of fore wings slightly ochreous.

Expanse of wings $2\frac{4}{10}$ inches. Brunei, Borneo; one example.

Allied to *M. alternans*, Pag. Iris, iii. p. 13, from Palawan, but the white band on the fore wings is much broader and there are no markings on the hind wings.

Family Drepanulidæ.

2. Oreta figlina, nov.

d. Palpi, head, frons, and legs crimson; antennæ, body,